

ABSTRACT

5 The present invention comprises the use of sulfite additives to reduce
discoloration of L-ascorbic acid produced from acid or aqueous solutions of 2-keto-
L-gulonic acid. In one aspect, the present invention comprises a continuous process
for producing L-ascorbic acid from an aqueous solution of 2-keto-L-gulonic acid.
The use of sulfite additives reduces product stream color and improves product
10 recovery by binding to high molecular weight reaction by-products. In a continuous
process, the reaction stream is separated from residual sulfite and sulfite-bound by-
products to produce a product stream enriched in aqueous ascorbic acid for recovery,
and an enriched 2-keto-L-gulonic acid stream which is recycled to the reactor. The
in situ use of sulfite additives during the reaction increases the overall yield of L-
15 ascorbic acid, with no loss in selectivity of the synthesis.

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